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Module 1 Number Sense
Lesson 2 Divisibility Rules

## Lesson Objective

- Use divisibility rules to determine if a number is a factor of another number ( $2,3,4,5,6,9$, and 10).


## Subtopic $1,2 \& 3$ Divisibility by $2,4,5 \& 10$

A number is divisible by another number if after dividing, the remainder is zero.
Divisibility Rules

- A number is divisible by 2 if the last digit is $\mathbf{0 , 2 , 4 , 6 , \text { or } 8}$.
- A number is divisible by 5 if the last digit is $\underline{0}$ or $\underline{5}$.
- A number is divisible by 10 if the last digit is 0 .
- A number is divisible by 4 if the last two digits are divisible by 4 .

Is 546 divisible by 2,5 , or 10 ?
divisible by 2 , not by 5 or 10


Is 430 divisible by 2,5 , or $10 ?$
divisible by 2,5 , and 10

Is 425 divisible by $2,4,5$, or 10 ?
divisible by 5 , not by 2 , 4 , or 10


Is 636 divisible by $2,4,5$, or 10 ?
divisible by 2 and 4, not by 5 or 10

## Subtopic 4 \& $5 \quad$ Divisibility by 3,6 \& 9

Divisibility Rules

- A number is divisible by 9 if and only if the sum of its digits is 9 .
- A number is divisible by 3 if and only if the sum of its digits is divisible by 3 .
- A number is divisible by 6 if and only if it is divisible by $\underline{2}$ and by $\underline{3}$.

